

ABSTRACT

A network device includes redundant buses, redundant master controllers, and slave controllers. Each of the master controllers connects to a corresponding one of the buses. One of the master controllers acts as an active master and the other master controllers act as standby masters. The active master commences a bus cycle that includes an address interval and a data interval, provides a destination address on the corresponding bus during the address interval, and transmits or receives a command or data during the data interval. The slave controllers connect to the bus, detect commencement of the bus cycle, sample the destination address from the bus a predetermined amount of time after commencement of the address interval, and transmit or receive a command or data during the data interval.